CALFED Solution Recommendation

Memorandum

Date: May 9, 2000

To: Bay-Delta Advisory Council

From: Chair Mike Madigan and Vice Chair Sunne McPeak

Subject: Revised Draft Recommendation on the CALFED Solution

Introduction

We appreciate the very constructive discussion on the CALFED Solution at the April 13, 2000 BDAC meeting. Your comments are the basis for the following revised draft recommendation on the CALFED Solution. We hope the discussion was beneficial to you, as well, and aided your understanding of Council members' views on the important water issues facing California. We want to reiterate that the Council has full support from the state and federal policy makers to continue the dialogue, as expressed by the CALFED Policy Group co-chairs David Hayes (Deputy Assistant Secretary of the Interior) and Mary Nichols (Secretary of Resources) at the April 19, 2000 Policy Group meeting.

On May 17, we expect to complete discussion on the CALFED Solution recommendation and will ask you to express your level of agreement (for example, support, agree to, can live with) with the revised draft recommendation. We expect that changes will be made at the meeting to broaden the level of agreement. We also expect to identify the remaining open issues and areas of disagreement. After the meeting we will finalize the recommendation as a letter to the Co-Chairs of the CALFED Policy Group. We expect to present this letter at the May 24, 2000 Policy Group meeting.

With respect to this revised draft recommendation, we began another "round" of underlines/strikeouts; meaning that the April 5, 2000 strikeouts have been deleted from the text and the underlined language is included as "regular text". The April 5 draft is provided at the end of the Correspondence section of this packet, as are major outcomes from the April 13 meeting. Detailed comments of your April discussion are attached to the meeting summary.

The new changes incorporate, in addition to your April 13 comments, language to address the identified open issues and major areas of disagreement. Much of the preamble, with revisions, has been incorporated into the main text of the recommendation, as well. As you review this revised draft keep in mind there may be subsequent drafts available for BDAC review on May 17.

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Revised Draft Recommendation

Summary

The Bay-Delta Advisory Council acknowledges that the CALFED Preferred Program Alternative (PPA) is programmatic and thus imbedded in it are many options for implementing the CALFED Bay-Delta Program over the next twenty to thirty years. The Bay-Delta Advisory Council thinks ~~believes~~ that the PPA ~~Preferred Program Alternative~~ as it is written is not sufficient to be a workable solution but contains the framework for an acceptable solution if modified to include more action in Stage 1 and greater specificity of actions that will ensure continuous improvement in ecosystem restoration, water supply reliability, levee system integrity and water quality.

General Recommendation

The Council recognizes that in some important respects the federal Record of Decision (ROD)/state Certification of the CALFED Programmatic Environmental Impact Statement/Environmental Impact Report (EIS/EIR) ~~the ROD/Certification~~ can only be regarded as the selection of a preferred approach to management of the Delta and its watershed. Potential conflicts among objectives have yet to be fully analyzed and balanced within the availability of limited resources. Uncertainties in science and technology will require flexibility, and substantial commitments should not be based on highly speculative judgements. The PPA ~~preferred alternative~~ commits to a "through-Delta" conveyance of water for export and to the pursuit of measures to improve water quality, protection of fish, and to closing the gap between water supply and demand. The purpose of this recommendation ~~preamble~~ is to suggest that CALFED commit to making the analyses that are needed (a) to develop and better refine the CALFED Solution early in the implementation process ~~define the preferred alternative~~, (b) to assure that there is a carefully considered balance among goals that compete for limited water and land resources, and (c) to establish the ground rules and boundaries that will govern implementation of the CALFED Solution ~~the further development of the PPA preferred alternative and its major components to a stage of development and specificity that can then be implemented. With this ROD/Certification:~~

Recommended ground rules include, but may not be limited to:

a) CALFED commits to compliance with the CALFED Solution Principles.

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- Reduce Conflicts in the System — Solutions will reduce major conflicts among beneficial uses of water.

- Be Equitable — Solutions will focus on solving problems in all problem areas. Improvements for some problems will not be made without corresponding improvements for other problems.

- Be Affordable — Solutions will be implementable and maintainable within the foreseeable resources of the Program and stakeholders.

- Be Durable — Solutions will have political and economic staying power and will sustain the resources they were designed to protect and enhance.

- Be Implementable — Solutions will have broad public acceptance and legal feasibility, and will be timely and relatively simple to implement compared with other alternatives.

- Have No Significant Redirected Impacts — Solutions will not solve problems in the Bay-Delta system by redirecting significant negative impacts, when viewed in their entirety, within the Bay-Delta or to other regions of California.

~~b)~~ Acknowledgement that ~~a~~As California's population continues to increase it is expected that water deliveries and associated impacts will reach into new areas. "P~~p~~roblem areas" include both terrestrial and aquatic habitat; both export and area of origin (including the Delta); water supply and quality; land and other resource needs for each of urban, environmental, and agricultural purposes. ~~Improvements in water quality, for example, for one purpose or region of use will not decrease water quality for another purpose or region of use.~~

c) CALFED commits that every broad or site specific measure for achieving CALFED goals will be analyzed technically and impartially before adoption and implementation in order to assure: compliance with CALFED's principles; compatibility with other goals; avoidance of significant third party and unmitigable cumulative impacts; addressing related environmental justice concerns ~~problems and impacts~~; and a balanced use of limited natural and financial resources. CALFED will create clear criteria for determining significant third party, environmental justice and unmitigable cumulative impacts. This will be done and revisions of the plan made by a process described ~~covered elsewhere~~ in the ROD/Certification.

d) In providing for the needs of California's environment and growing population over the life of the plan, CALFED will not worsen or exacerbate ~~rely on~~ depletion of natural soil and groundwater resources.

e) CALFED will identify which decisions will be made in Stages I and future stages of implementation.

f) CALFED will continue to seek ~~adopt~~ and achieve environmental justice. The CALFED Bay-Delta Program and its participating agencies are committed to seeking fair treatment of people of all races, cultures, and incomes, such that no segment of the population bears a disproportionately high or adverse health or environmental impact resulting from CALFED's Programs, policies or actions.

In continuing to seek environmental justice, CALFED will develop programs, policies and actions to:

- identify and evaluate the environmental, health, social , and economic effects of CALFED activities;
- propose and commit to measures to avoid and mitigate disproportionate effects;
- seek participation from potentially impacted communities in finding alternatives or solutions to mitigate impacts;
- improve research and data collection related to the health and environment of minority and low-income populations impacted by CALFED Bay-Delta Programs;
- Support outreach and education activities to improve the public's ability to participate in CALFED decision-making and program implementation, including transparent and facile public access to data taken from all programs.

~~as an operating principle and include the principle in the decision-making process. The process will commit to developing strategies that empower and engage community-based organizations, urban watershed groups, tribes and affected local residents to address Program objectives.~~

Specific Recommendations

The Council recommends to the CALFED agencies aggressive progress, from now and into implementation of the CALFED Bay-Delta Program on the following issues. This progress will lead to important future decisions on the best solution alternative for the Bay-Delta watershed, consistent with the CALFED mission, ~~and~~ Solution Principles, and the PPA.

Funding and Accountability

1. Identifying assured funding for all Program elements. To be accountable, CALFED shall provide annual reports on budget expenditures and progress made on meeting Program goals to the California Legislature and Congress. The California Legislative

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Analyst's Office and federal General Accounting Office should audit the CALFED Bay-Delta Program on an annual basis. ~~Funding shall not be exempt from annual appropriations processes.~~

2. Developing long term funding formulae for all Program elements. Formulae should include appropriate contributions from all beneficiaries in proportion to benefits received. Beneficiaries would be those interests who receive benefits from Program projects and actions.

Decision-Making

3. Instituting a transparent decision making process that incorporates participation with tribes, local and environmental justice interests. The decision-making structure and process must include high-level representatives from each of the CALFED agencies, institutionalize stakeholder and tribal participation and address involvement ~~participation~~ by the California Legislature and Congress. ~~Refer to the attached December 10, 1999 memo from Mike Madigan and Sunne Wright McPeak to Hap Dunning and Eze Burts for more detail.~~

BDAC acknowledges that the decision making process will be staged and will use adaptive management as a tool to ensure informed decision-making. Adaptive management means learning and involving policy makers, scientists and the public as the process goes forward. It is defined as a process for acting deliberately under uncertainty by increasing opportunities to develop new information and redirecting management actions in a timely manner. Staged decision making involves identifying certain actions to implement at the outset for which there is sufficient information and general agreement and developing conditions for future decisions and for moving beyond the first stage.

Water Supply Reliability and Ecosystem Restoration

Background

The June 1999 Phase II Report states that water supply reliability goals are to increase the utility of available water supplies (making water suitable for more uses and reuses), improve access to existing or new water supplies in an economically efficient manner for environmental, urban and agricultural beneficial uses, and to improve flexibility of managing water supply and demand in order to reduce conflicts between beneficial uses, improve access to water supplies, and decrease system vulnerability. Water management tools for meeting the goals are: water use efficiency (agricultural, urban, and wetland water conservation and water recycling); water transfers; conveyance; storage; operational strategies; watershed actions; water quality actions; real time monitoring.

Recommendations

4. Balancing ~~Guaranteeing~~ Delta inflows and outflows that recover and sustain native fish and wildlife populations (with specific emphasis on endangered species) with ~~tying~~ corresponding improvements in ocean fisheries management (such as limiting harvest of wild anadromous fish stocks to levels that sustain healthy populations), water supply reliability and availability for all beneficial uses.

5. Implementing the Ecosystem Restoration Plan and Environmental Water Account to provide assurances for recovery of ~~that~~ Delta fisheries. ~~are in a "no jeopardy" condition~~. Establish and capitalize the Environmental Water Account with a "water budget" and seek to minimize ~~ensure that~~ taking of additional water ~~is not taken from~~ supplies through further regulatory actions.

6. Developing water use efficiency measurable, cost effective ~~quantifiable~~ objectives for all water use ~~economic~~ sectors and optimizing water use efficiency for environmental, urban and agricultural uses under all circumstances. "Optimizing" means to achieve the most efficient or best use of water use efficiency tools.

7. Identifying complimentary benefits and ~~Optimizing~~ appropriate links between storage, water use efficiency, environmental restoration, water quality, Delta conveyance and water transfers.

8. Reaching decisions in Stage 1 regarding groundwater and surface storage, using the adaptive management approach described above. Identify in the ~~ROD Record of Decision~~/Certification specific storage facilities to be planned and designed ~~engineered~~ and timetables for completing water management studies, with the goal of reaching decisions on permitting storage and initiating construction in Stage 1. Environmental impact analyses shall appropriately address economic and environmental impacts and related mitigation measures.

9. Reaching a decision on constructing a screened diversion on the Sacramento River in Stage 1 to improve in-Delta and export water quality. Environmental impact analyses shall appropriately address economic and environmental impacts and related mitigation measures.

~~10.~~ Defining the plan for o~~O~~ptimizinge through Delta conveyance in an effort ~~order~~ to meet in-Delta and export water quality, ecosystem restoration, and water conveyance goals. Reach agreement on the timetable for optimizing through-Delta conveyance and determining through peer-reviewed study whether its operation meets fishery, water quality and water supply reliability goals. ~~operating optimized facilities to observe results though a sufficient number of representative water years (for example, 7 to 10 years)~~

In developing an optimum plan for through Delta conveyance of water for export, the analyses and requirements of the plan should ~~will~~ include but not be limited to the following.

- ~~The Preferred Program Alternative for~~ Tthrough-Delta conveyance and interrelated plans should ~~will~~ be fully analyzed and modified as necessary to comply with all of the state and federal current and future water salinity and dissolved oxygen standards.

- Through Delta conveyance ~~The Preferred Program Alternative~~ It also should ~~will also~~ be optimized for compatible and balanced provision of in-Delta habitat, fish protection, native wildlife, in-Delta water quality, export water quality, protection of adequate South Delta water levels, conveyance of flood flows, and seismic risk. Local expertise, such as ~~i.e.~~ U.C. Extension Services, farm advisors, NRCS District Conservationists, CDFG Unit Managers, should ~~will~~ be fully utilized in making this assessment.

- This optimization should ~~will~~ include consideration of alternative ways to get Sacramento River water to the Central Delta with balanced protection of fisheries and native wildlife. The alternatives considered should ~~will~~ include real time flow control through the Delta Cross Channel, Georgiana Slough, and Steamboat Slough, modification of flow patterns by dredging, flow control barriers, behavioral and screened control of fish. Optimization may also include a new channel from the Sacramento River to the Mokelumne channels providing that it is physically limited in capacity to not more than 4,000 cfs and can not readily be expanded in capacity.

- Study of an isolated conveyance facility should be pursued as a backup in the event that an optimized through-Delta system does not provide sufficient improvement in fisheries, water quality, and water supply reliability. This study should lead to a defined proposal which can be compared to the optimized through Delta conveyance regarding its potential for providing balanced improvement and protection for the environment, and in-Delta and export interests. The study must be developed through a peer-reviewed process to ensure objective analysis. ~~must be independent of the optimizing process so that proponents of such a facility canal can not jeopardize that optimization process.~~

- Provided baseline environmental and regulatory conditions have not significantly altered the prospects of successful optimization of a through-Delta strategy, the judgement as to whether the through-Delta conveyance system has been optimized, and the judgement as to whether it has been adequately tested must be made after all major features have been in place and operated through a sufficient number of years to constitute a representative spectrum of water years. ~~In addition and results must have been monitored through a~~

~~representative series of hydraulic situations~~. This assessment must then be made by an open process that includes deliberation by all interests that are directly affected by water management in the Central Valley watershed.

11. Conducting in Stage 1 the requisite feasibility studies for isolated conveyance, provided that there is a sincere effort to optimize through-Delta conveyance and other water quality improvement strategies.

Water quality improvement for one region or one purpose of use should ~~will~~ not be made in a way that would degrade the desirable quality of water for another region or purpose of use. Because water quality needs vary depending on uses, water transfers and/or exchanges can be made, but must be avoided if they cause or exacerbate problems of salt disposal, degrade groundwater quality, impact fisheries, increase fish contamination or cause significant redirected impacts.

New water development usually provides high quality water, and this can provide an overall water quality improvement that is not adverse to any user or purpose of use. However, manipulation of the new supply to benefit quality for a particular purpose of use may diminish the potential magnitude of the new supply. Such benefits should be funded by beneficiaries in proportion to benefits derived.

12. Accurately identifying water supply increases from CALFED and private party actions.

CALFED should ~~will~~ promptly forecast a range of probable water supply needs in and from the Central Valley to meet the reasonable future needs for urban, environmental, and agricultural purposes throughout the life of the CALFED plan. In addition, CALFED will promptly forecast how much water supply is needed to avoid long-term overdraft of groundwater.

The environmental need will be based on CALFED's proposed Ecosystem Restoration Plan. The urban need will be based on urban growth estimates with due regard to predicted and planned population centers. The agricultural need will be considered to be within a range for which the lower end would maintain the average level of consumptive water use that has been available over the past decade for the production of agricultural products on 10 million acres of prime irrigated land and 20 million acres of range or grazing land. The upper end of the range would maintain this same level of water for consumptive use on a per capita basis over time as the population grows.

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CALFED will then assess the extent that this overall need can realistically be expected to be met with existing infrastructure and with the following methods that are commensurate with the alternative cost of water development:

(a) realistically achievable improvement in multiple use of existing supplies,
(b) realistic improvement in water recycling by districts,
(c) realistic recycling of stream flows, and
(d) realistically achievable desalinization of water otherwise too salty for reuse by methods that include the disposal of salt and other water borne contaminants.

With the likelihood of probable shortages in water supply over the life of the plan, CALFED will ~~then~~ examine the physical feasibility of developing enough increase in water supply to avoid this shortage. It will examine the most cost effective and the least environmentally damaging ways to provide the groundwater and surface storage necessary to increase supply. It will examine the environmental, social, and other costs if the supply is not provided and the water shortage is shared in a balanced manner among the environmental, urban, and agricultural needs. It will examine the increase in value of water that would be necessary to justify the cost of the needed additional water supply, and the lead-time necessary to increase the supply.

After these analyses are available there will be an open process of evaluating the results and determine to what degree the legislature and the electorate wish to close the gap between supply and demand versus coping with the consequences of a future shortage.

~~13. Balancing competing water quality and quantity needs within and outside the Delta.~~

14. Providing water supply reliability assurances during Stage 1.

15. Identifying in the ROD/Certification a timetable for addressing the following open issues:

- Integration of the Ecosystem Restoration Plan, other Bay-Delta restoration plan and the Environmental Water Account.
- Determining appropriate water flows and other restoration actions for recovery of native Delta fishes.

- Whether and how to balance the needs of fisheries with water supply, water quality and other needs of water users.
- Who gets the water saved by implementing water use efficiency measures.

Water Operations

16. Revising state and federal water operations rules, through scientific peer review and other means, to incorporate "alarms" for elevating decisions when water quality and supply objectives, as well as fisheries objectives, are threatened.

~~The Bay-Delta Advisory Council also recommends the following preamble for the Record of Decision/Certification.~~